

Appl. No. 08/908,872  
Amdt. Dated 8/31/06

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) An electrical connector comprising:

a housing; ~~and~~

a rigid genderless electrical contact mounted within said housing, said rigid genderless electrical contact having a longitudinal axis, a proximal end and distal end, said distal end terminating in a planar electrical contact engaging surface with the plane thereof intersecting the longitudinal axis at a predetermined angle, said planar electrical contact engaging surface being positionally maintained within said housing to permit repeatable electrical engagement with a planar electrical contact engaging surface of a corresponding rigid genderless electrical contact; and

a spring element mounted within said housing and bearing against said rigid genderless electrical contact to spring load the rigid genderless electrical contact.

Claim 2 (Original) The electrical connector of claim 1 wherein the plane of said planar electrical contact engaging surface intersects the longitudinal axis at an predetermined angle in the range of 8 to 39 degrees inclusive.

Claim 3 (Currently Amended) An electrical connector comprising:

a housing; ~~and~~

a rigid genderless electrical contact mounted within said housing, said rigid genderless electrical contact having a longitudinal axis, a proximal end and distal end, said distal end terminating in a planar initial electrical contact engaging surface portion with the plane thereof intersecting the longitudinal axis at a predetermined angle and an arcuate final electrical contact engaging surface portion, said initial and final electrical contact engaging surface portions being positionally maintained within said housing to permit repeatable

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electrical engagement with planar initial and arcuate final electrical contact engaging surface portions, respectively, of a corresponding rigid genderless electrical contact; and

a spring element mounted within said housing and bearing against said rigid genderless electrical contact to spring load the rigid genderless electrical contact.

Claim 4 (Original) The electrical connector of claim 3 wherein the plane of said planar initial electrical contact engaging surface intersects the longitudinal axis at an predetermined angle in the range of 8 to 39 degrees inclusive.

Claim 5 (Canceled)

Claim 6 (Previously Presented) The electrical connector of claim 3 wherein said rigid genderless electrical contact includes an electrical conductor engaging element.

Claim 7 (Previously Presented) The electrical connector of claim 3 wherein said housing also is genderless so that the electrical connector can mate with another electrical connector having a corresponding rigid genderless housing and a rigid genderless electrical contact.

Claim 8 (Previously Presented) An electrical connector assembly comprising:  
a first electrical connector comprising:

a housing; and,

a rigid genderless electrical contact mounted within said housing, said rigid genderless electrical contact having a longitudinal axis, a proximal end and distal end, said distal end terminating in a planar electrical contact engaging surface portion with the plane thereof intersecting the longitudinal axis at a predetermined angle;

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a second electrical connector comprising:

a housing; and,

a rigid genderless electrical contact mounted within said housing, said rigid genderless electrical contact having a longitudinal axis, a proximal end and distal end, said distal end terminating in a planar electrical contact engaging surface portion with the plane thereof intersecting the longitudinal axis at a predetermined angle;

said first and second electrical connector rigid genderless electrical contacts being electrically engagable with each other with the planes of the planar electrical contact engaging surface portions intersecting the longitudinal axes at substantially the same predetermined angle and with the planar electrical contact engaging surface portions being positionally maintained within their respective housings so that said planar electrical contact engaging surface portions are substantially parallel at the moment of their electrical engagement thereby permitting repeatable electrical engagement with minimal contact bounce thereof.

Claim 9 (Previously Presented) An electrical connector assembly comprising:  
a first electrical connector comprising:

a housing; and

a rigid genderless electrical contact mounted within said housing, said rigid genderless electrical contact having a longitudinal axis, a proximal end and distal end, said distal end terminating in a planar initial electrical contact engaging surface portion with the plane thereof intersecting the longitudinal axis at a predetermined angle and an arcuate final electrical contact engaging surface portion;

a second electrical connector comprising:

a housing; and,

a rigid genderless electrical contact mounted within said housing, said rigid genderless electrical contact having a longitudinal axis, a proximal

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end and distal end, said distal end terminating in a planar initial electrical contact engaging surface portion with the plane thereof intersecting the longitudinal axis at a predetermined angle and an arcuate final electrical contact engaging surface portion;

said first and second electrical connector rigid genderless electrical contacts being electrically engagable with the planes of the planar initial electrical contact engaging surface portions intersecting the longitudinal axes at substantially the same predetermined angle and with the planar initial electrical contact engaging surface portions being positionally maintained within their respective housings so that said planar initial electrical contact engaging surface portions are substantially parallel at the moment of their electrical engagement thereby permitting repeatable electrical engagement with minimal contact bounce thereof.

Claim 10 (Original). The electrical connector assembly of claim 9 wherein the magnitude of the predetermined angle of intersection of the planes with the longitudinal axes is established as a function of a predetermined rate of closure of the planar initial electrical contact engaging surface portions during electrical engagement thereof.

Claim 11 (Original). The electrical connector assembly of claim 10 wherein the magnitude of the predetermined angle of intersection of the planes with the longitudinal axes decreases as the rate of closure of the planar initial electrical contact engaging surface portion increases.

Claim 12 (Original). The electrical connector assembly of claim 11 wherein the magnitude of the predetermined angle of intersection of the planes with the longitudinal axes is established in accordance with the following table:

| <u>Predetermined angel (degrees)</u> | <u>Rate of Closure</u> |
|--------------------------------------|------------------------|
| <u>(meters/sec)</u>                  |                        |

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|      |          |
|------|----------|
| 39   | .1 to .1 |
| 30   | .1 to 3  |
| 25   | .1 to 5  |
| 13.5 | .1 to 10 |
| 8    | .1 to 15 |

Claims 13-22 (canceled)